

ABSTRACT

An apparatus and method are provided for shipping, storing, and high-throughput processing of microarrays. An exemplary microarray cartridge according to the present invention includes a body having a cavity defined by an outer surface and two dimple features in fluid communication with the cavity. The cavity includes at least one ledge for supporting a microarray of biological probes, and a reaction chamber defined at least in part by the ledge. A plate covers the cavity and sealingly attaches to the outer surface of the body. Ports in the plate or the dimple features allow introduction of sample, reaction and wash solutions into the reaction chamber such that the solutions contacts the probes on the microarray. The disposable microarray cartridges of the present invention are used to package and store microarrays prior to use and to process microarrays in a high-throughput manner. The footprint of the cartridge is designed to be compatible with standard robotic formats or standard re-formatting approaches.